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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/516,900	12/03/2004	Norman L. Holy	147-04	8734
27569	7590	05/26/2006	EXAMINER	
PAUL AND PAUL 2000 MARKET STREET SUITE 2900 PHILADELPHIA, PA 19103			ARK, DARREN W	
			ART UNIT	PAPER NUMBER
			3643	

DATE MAILED: 05/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/516,900

Applicant(s)

HOLY, NORMAN L.

Examiner

Darren W. Ark

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 2/10/2005.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 13-15, 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al. 5,913,670.

Anderson et al. discloses a rope comprising weak fibers (weakened section 63) for use with fishing gear (buoys 21, buoy lines 22, a sink gillnet 23, and lobster trawl 24), wherein the rope has a diameter and breaks between 600 and 2200 pounds of pulling tension (see col. 6, lines 7-41), but does not disclose the rope having a diameter between 5/16 inch and 1.0 inch. It would have been an obvious matter of design choice to design the rope such that it has a diameter between 5/16 inch and 1.0 inch in order to make the rope of sufficient size to be able to haul the fishing equipment into the boat and fit the standard rope and net hauling equipment such as pulleys, sheaves, etc. It is also noted in applicant's specification at page 2, paragraph 6, that "Conventional rope...has a...diameter range of 5/16-7/16 inches".

3. Claims 2-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al. 5,913,670 in view of Morris et al. 3,697,474.

Anderson discloses the device made from selected materials including polymers (see col. 5, lines 35-47), but does not disclose the rope comprising fibers comprising 30-90 wt% of a thermoplastic polymer and a 20-70 wt% filler distributed uniformly in the polymer and the filler having an average particle size under 100 microns. Morris et al. discloses a rope comprising fibers (see col. 1, lines 42 & 47) which comprise 30-90 wt% of a thermoplastic polymer (see cols. 6 & 7) and a 20-70 wt% filler (see col. 4, lines 54-end & col. 5, lines 1-72) distributed uniformly in the polymer and wherein the particle size of the filler can range from very fine to very coarse depending upon the end use of the composition. Morris et al. also discloses a filler particle size under 100 microns (fiber itself of Example II is 26 microns in diameter) and that "When untreated kaolin is used the break strength falls off rapidly as filler loading is increased," at col. 11, lines 42-43. It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the fibers of Anderson et al. such that they comprise 30-90 wt% of a thermoplastic polymer and a 20-70 wt% filler distributed uniformly in the polymer in view of Morris et al. in order to provide means for adjusting the breaking strength of the rope as desired.

4. Claims 8-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al. 5,913,670 in view of Lamb et al. 3,705,074.

Anderson et al. discloses the device made from selected materials including polymers (see col. 5, lines 35-47), but does not disclose that the weak fibers are formed of a blend of at least two polymers having limited compatibility. Yamada discloses a fibrillated monofilament for use in ropes (see col. 5, lines 12-20) wherein the fibers are

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formed from a blend of at least two polymers (polypropylene and polyester) having limited compatibility (see col. 2, lines 50-59) consisting of 90-60 wt% (see claim 1) polypropylene and 10-40 wt% polyethylene (see claim 1) and that "the low strength of the polyester component and the significant incompatibility between the components which constitute the microfibrils and those which form the matrix plays an important role in the case of fibrillation observed with these systems" (see col. 5, lines 1-20). It would have been obvious to a person of ordinary skill in the art to modify the weak fibers of Anderson et al. such that they are formed of a blend of at least two polymers having limited compatibility in view of Lamb in order to provide a rope of limited strength that may be cheaply and readily manufactured in mass form.

5. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Herrington 2,081,146 in view of Anderson et al. 5,913,670.

Herrington discloses a trawl net with a headrope (12) which breaks at a higher pulling tension than netting rope (finer mesh found in sections 18-20; also the head rope 12 is shown drawn with a thicker line than the mesh of the net), but does not disclose the netting rope breaking at a higher tension than the headrope. Anderson et al. discloses a rope for use in fishing equipment that will break at a sufficient force generated by a whale entangled with the fishing equipment. It would have been obvious to a person of ordinary skill in the art to modify the trawl net of Herrington such that the netting rope breaks at a higher tension than the headrope in view of Anderson et al. in order to provide a main net structure that will break upon encountering a whale

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that becomes entangled therein so as to prevent entanglement and drowning of the whale.

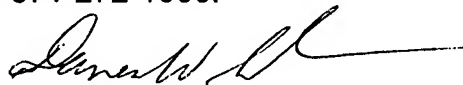
### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Katayama 6,537,660 discloses that polyolefin fibers are widely used in ropes and that a mixture of polypropylene and .05 to 10% by weight of barium sulfate having a size of .01 to 5 microns (see col. 6, lines 56-end; that is less than 100 microns). Maeda 4,745,027 discloses a polyester fiber mixed with barium sulfate which has a particle size of about .5 to .6 microns (see Examples 1 & 2; less than 100 microns). Gessner et al. 5,612,123 discloses a blended resin with a relatively small portion of high melt flow rate polyolefin resin and a larger portion of low melt flow rate polyolefin resin.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Darren W. Ark whose telephone number is (571) 272-6885. The examiner can normally be reached on M-Th, 8:00am-6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter M. Poon can be reached on (571) 272-6891. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Darren W. Ark  
Primary Examiner  
Art Unit 3643

DWA